



## CSRT Rapid Response Return to Practice Toolkit – Oxygen Therapy

### Resources (Basic Review):

- Oxygen Therapy Clinical Best Practice Guideline, College of Respiratory Therapists of Ontario (PDF): [Click here](#)
- Oxygen Therapy Devices (video): [Click here](#)

### Oxygen cylinder duration of flow

Duration of flow (minutes) =  $\frac{\text{Pressure in cylinder (psig)} \times \text{cylinder factor}}{\text{Flow (lpm)}}$

Cylinder factors:	H and K size	3.14
	G size	2.41
	M size	1.56
	E size	0.28

Important! Deduct EITHER 500 psig from the pressure in the cylinder OR 30 minutes from the final calculation to introduce a margin of safety.

### Adult Oxygen Therapy – Low flow devices

Device	Flow rate (lpm)	Approximate FiO <sub>2</sub> *
Nasal cannula	1	0.24
Nasal cannula	2	0.28
Nasal cannula	3	0.32
Nasal cannula	4	0.36
Nasal cannula	5	0.40
Nasal cannula	6	0.44
Non-rebreather	10-15 (keep reservoir bag from collapsing on inspiration)	0.60-0.80 (can theoretically provide 100%)

\*Will vary with patient's respiratory pattern and depth.

### Adult Oxygen Therapy – High flow (Venturi) devices

Device	Flow rate (lpm)	FiO <sub>2</sub> *
"Venti-mask";	As indicated	0.24-0.50
"Entrainment mask"	on FiO <sub>2</sub> adapter	

\*Assuming device is set as indicated on the device

The CSRT Rapid Response Refresher Resource is intended to provide respiratory therapists with review materials. For information specific to the management of Coronavirus disease, please refer to the CSRT COVID-19 resource page: <https://www.csrt.com/csrt-novel-coronavirus-resources/>.